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# THE TOKENIZATION OF REAL ESTATE

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Data Management and Liquidity Solutions For Private Real Estate Assets



# VERTALO



A Whitepaper Introducing The Tokenization of Real Estate with Vertalo, 'The Operating System for Digital Assets'

*Prepared By Vertalo & Advantage Blockchain*

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## EXECUTIVE SUMMARY

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Real Estate as an investment has throughout history proven to be one of the strongest performing asset classes. As the largest asset class in the world with a combined estimated value of over \$228 trillion, investing in Real Estate has many advantages over investing in stocks, bonds or mutual funds. The most notable benefits of investing in Real Estate and Real Estate-based financial products typically include: a predictable cash flow and ability to generate passive income, an improvable asset with the ability to appreciate in value, and an array of benefits surrounding leverage capabilities and tax advantages.

However, Real Estate investment transactions remain frozen in time, conducted in the same manner as they have been since the late 1900's. Using outdated infrastructure, paper based processes, and multiple third-party intermediaries, the real estate sector has internalized significant structural inefficiencies. These traditional practices create unnecessary friction in transactions, impacting value and liquidity, while market participants have previously had no option but to tolerate the complex regulations and processes associated with real estate investments.

Vertalo's platform is positioned to modernize real estate transactions and deals by transitioning them into the digital age, making significant improvements in real estate transaction efficiency, cost, security and liquidity. Vertalo is using blockchain-based technology to eliminate the largest inefficiencies associated with real estate capital raising, management and investing.

Founded in 2017, Vertalo is a software company that connects and enables the digital asset economy. Process driven friction in private markets present challenges to illiquidity, speed, record accuracy, and market efficiency. As an SEC-registered transfer agent, Vertalo connects investor and asset data to broker-dealers, custodians, and sources of liquidity, thereby reducing this friction. Vertalo is the data management platform that connects shareholder and issuer data to ecosystem partners via API's.

In the traditional real estate landscape, Issuers and Real Estate Investment Trusts (REITs) must deal with the complexities of asset and investor management, lengthy ownership transfers, regulatory investor compliance, expensive business operations, maintaining cash and dividend flow, security against fraudulent transactions by bad actors, and an overarching obstacle of liquidity complications. The Vertalo Real Estate (VRE) platform provides a comprehensive solution to each of these areas.

The Vertalo Real Estate (VRE) platform is

1. Leveraging next generation ledger technology behind a new digital interface to optimize efficiency in investors & property management
2. Implementing smart contract technology to expand the capabilities of transactions, improve cash flows, and shorten cycle times
3. Maintaining bank-grade security & regulatory compliance by employing cryptographically secured decentralized ledger (commonly referred to as blockchain) technology.

The overarching goal through all of these procedural improvements is to drastically increase liquidity in the real estate industry. This introduction to the Vertalo Real Estate (VRE) platform serves to educate both real estate investors and issuers, establish capabilities, and invite the comment and expansion upon ideas related to the tokenization of real estate assets.

## VERTALO REAL ESTATE (VRE) MISSION

Vertalo's mission in real estate is to improve the efficiency and liquidity of real estate markets by offering an investor data management portal enabling simple, fast, cost-efficient, and globally syndicated transactions. Vertalo strives to provide the most fluid and practical digital functionality needed for capital raising, asset governance, automated compliance, investor management, and custodial solutions. Vertalo's technology offers a platform that modernizes the traditional investment process via the conversion of legacy certificates into tradeable digital securities, creating a clear path to an entirely new frontier of capital in real estate; 24/7 asset liquidity through digitized ownership and direct market liquidity.

## THE PROBLEM

To understand the potential impact of technology-driven improvements in the real estate investment industry it is critical to first understand the existing inefficiencies. Siloed private asset market participants like Real Estate Investment Trusts and Real Estate Funds have suffered from high administrative costs and low liquidity options caused by antiquated technology stacks, where investor and user data cannot be easily managed or shared. As such, private asset markets are notoriously illiquid, slow, and difficult to access, which results in prohibitive and costly administrative processes and lack of price discovery that deter efficient market activity and further entrepreneurship.

Real Estate transactions have been conducted in minimally-variable structures for decades, as a fully integrated digital solution has yet to exist. Since the inception of the real estate investment industry, issuers and investors faced the complexities of manual asset and investor management, lengthy ownership transfer processes, regulatory investor compliance, low margin business operations, maintaining cash and dividend flow, securing against fraudulent transactions by bad actors, and an insurmountable obstacle of liquidity complications. Adding to the cost and complexity have been third-party intermediaries, such as lawyers, brokers, and banks that tend to benefit from the complexity of these transactions, implementing rent-seeking cost structures for captive investors and fund managers. The result is complex and expensive transactions, leaving real estate investment to be a lengthy and inefficient process for buyers, sellers, investors & issuers.



While most forms of commerce have established digital infrastructure, real estate asset investment management broadly lags behind. No standardized processes exist for real estate transactions, beyond those that are regulated, which preclude technological integration and enables a series of costly middlemen. The right technology and process can be standardized through the use of digital assets, electronically represented ownership records maintained on a digital ledger.

VRE is a technology solution leveraging distributed ledger technology that enables secure and efficient creation, issuance, and management of digital assets. Our goal with tokenization of real estate is to use Vertalo's technology to optimize real estate transactions by making the process efficient and cost-effective for all parties involved.

Although the new technology comes with benefits, tokenization proposes new challenges and processes to an industry that is typically resistant to change. Vertalo is focused on user experience, and the Vertalo software creates a user-friendly portal for managing digital assets. The underlying blockchain technology behind the software solution ensures that digital assets are managed securely & efficiently. The Vertalo tokenization platform is a solution designed specifically for compliance and efficiency in managing all real estate assets, including REITs and assets trusts.

## OPPORTUNITY IN THE MARKET

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Real estate assets are an essential component of a well-balanced portfolio, often yielding superior risk adjusted returns relative to publicly traded stocks or bonds. Real estate's attractive investment profile stems from the pairing of passive income and strong inflation adjusted historical appreciation rates. Despite clear benefits, the real estate asset class is still one of the most difficult to invest in and remains inaccessible to common investors. Currently, investment in real estate requires significant up-front capital, real estate management knowledge and experience, or pre-existing industry relationships. Tokenization provides a novel opportunity to widen the global investor base to investors with investable capital who may lack the knowledge or network to enter the market. There exists significant demand by investors for a trustless, compliant, and borderless way to connect to real estate. The following data highlights several areas in the Real Estate market prime for disruption by a blockchain-based data management solution such as Vertalo:

### Big Picture

- Real estate is the largest asset class in the world, valued at over \$228 trillion, eclipsing the world's gold supply of \$8 trillion. Real Estate represents about 60% of the world's assets and is greater than the value of all stocks and bonds combined.

### Investor Accessibility

- Calculated using Federal Reserve SCF microdata, in 2016 there were an estimated 12,417,040 accredited investor households in America. Accredited investor households controlled roughly \$65.88 trillion in wealth in 2016 or 75.8% of all United States private net worth.
- The Chinese government limits the amount its citizens can invest abroad. Apart from tuition, Chinese citizens are restricted from taking more than the equivalent of about \$50,000 USD out of the country; making full real estate investments nearly impossible.

### Fees

- Global investment fees reached a record high of \$104 billion in 2017, according to Reuters.
- Today, staff costs make up 50% - 75% of an issuer's overall operating costs due to highly manual and inefficient asset & investor management office processes. Tokenized real estate transactions will remove a \$155 billion middleman. Revenue from the real estate Sales and Brokerage industry is extracted by commission-based agents that are directly correlated with property prices and real estate transaction volumes.

#### Liquidity

- The "Illiquidity Tax" is estimated to devalue assets by as much as 20-30%. This represents the cost of bearing the burden of an illiquid asset, impacting asset valuation and portfolio return.

#### Technological Innovation

- Research by the National Association of Realtors in the US determined that online websites were used in 95% of all home purchases and that an online search was the first step homebuyers take 44% of the time.
- According to the World Economic Forum, in the next ten years, 10% of the world's GDP will be stored on the blockchain as digital assets through a process called tokenization. That's \$10 trillion worth of assets stored as tokens.
- Fractional real estate markets are not a blockchain invention. Since the JOBS act passed in 2012, real-estate crowdfunding companies have used the Reg D 506(c) exemption to sell real-estate shares to accredited investors.

The establishment of JOBS act exemptions led to expansion in private capital formation formation, driving and significant private market and crowdfunding activity. Building on these frameworks and driven primarily by the emergence of blockchain technology, ICO sales of 2017 and 2018 were demonstrative of the global demand for fractional ownership, accelerated liquidity pathways, and efficient capital formation mechanisms. Adapting these methods for institutional practices and automated regulatory compliance, the tokenization of real estate provides structural efficiencies and cost savings, broadening the global investor base and enhancing liquidity on both a primary and secondary transaction basis.

## VERTALO'S SOLUTION

Vertalo's platform will initially target three primary classes within the real estate investment sector:

- (1) The Real Estate Investor
- (2) Real Estate Funds & Real Estate Investment Trusts (REITs)
- (3) Real Estate Crowdfunding Platforms (Issuer/Capital Raising Platforms).



## 1) THE REAL ESTATE INVESTOR

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Real estate has long been a portfolio staple of the wealthy. Very few assets manage to provide the same degree of passive income and capital appreciation on a risk adjusted basis. However, many barriers exist that prohibit the common investor from participating. Investors want exposure to real estate assets for their portfolio, and the option to purchase fractional ownership of a property lowers the barrier to entry relative to traditional real estate assets. Once investors hold tokenized real estate assets, the ability to directly list and trade ownership interest in a simple and intuitive manner will enable new forms of market activity.

Tokenization has been proven to date in the context of capital formation events, which have become increasingly popular among real estate investors. With direct ownership of their assets, Investors have the option to borrow against real estate equity as collateral. This emergent credit model creates new, appealing opportunities for many real estate investors. The current real estate environment does not offer much accessibility to this type of multi collateral DAO, and Tokenization will create multiple opportunities to preserve and grow capital outside of traditional real estate.

In terms of asset management, tokenization simplifies real estate by connecting General Partners and limited partners. Markets that had previously required pre-existing relationships, where capital formation was facilitated by phone calls and in-person meetings, the implementation of digital solutions bring market participants closer together. This imparts a positive effect on management efficiency. The ability to easily and seamlessly connect with reputable GPs significantly expands the market for real estate investment.

## 2) REAL ESTATE FUNDS & REAL ESTATE INVESTMENT TRUSTS (REITs)

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*"Nontraded REITs are costing investors, especially elderly, retired, unsophisticated investors, billions. They're suffering illiquidity and ignorance, and earning much less than what they ought to be earning."*

*Craig McCann, a former economist with the US Securities & Exchange Commission*

**Real Estate Investment Trusts (REITs)** are legal structures that own or finance properties that generate income, and by law distribute 90% of their earnings to shareholders. REITs can be publicly traded or established privately between investors. While initially an American invention, public REITs are now available in most geographies, with their total market capitalization growing from \$734 billion in 2010 to \$1.7 trillion in 2016. If anything, the success of public REITs indicates the need to develop cheaper and more efficient tools to invest in real estate.

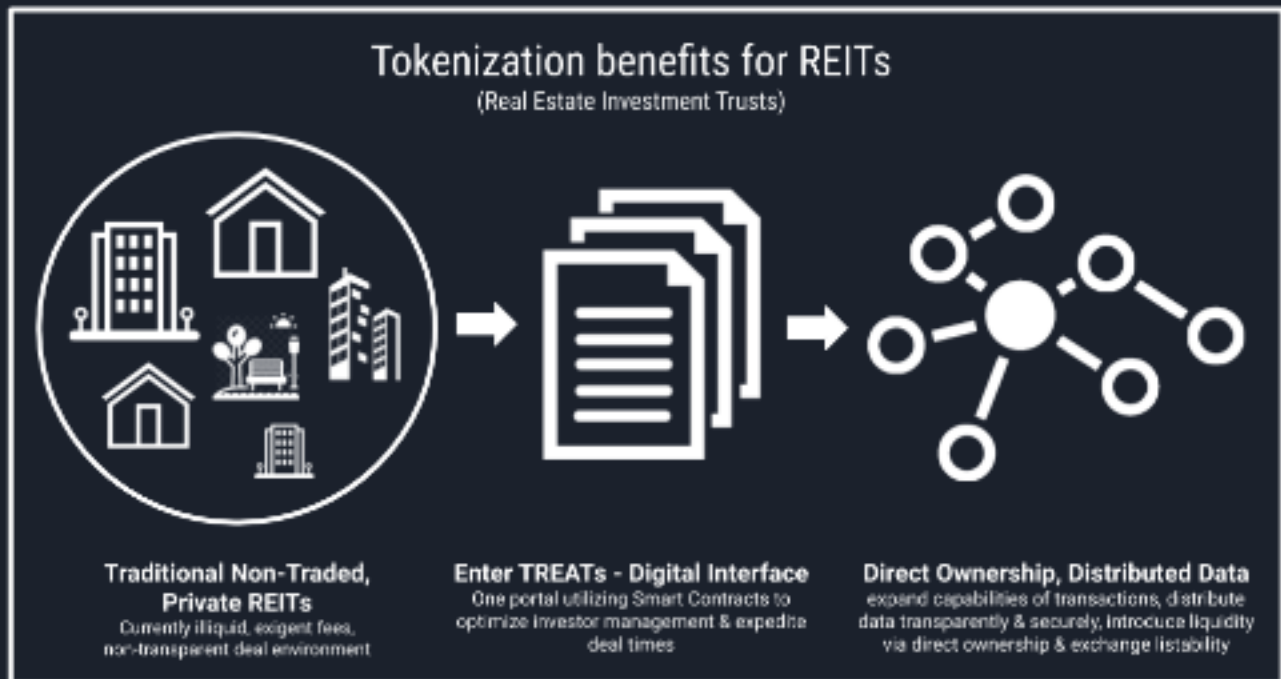
### REITs

- NAREIT, a Washington D.C. based research and advocacy firm for the U.S. based REIT market, estimates 80 million U.S. investors own REITs through their retirement savings and other investment funds.
- REITs in the United States own approximately \$3 trillion of gross real estate assets, and public listed equity REIT portfolios included more than 500,000 properties at year-end 2017.
- NAREIT analyzed detailed property data from CoStar and estimated the total size of US commercial real estate to be between \$14 and \$17 trillion. REITs hold an estimated 10% of total commercial real estate and 20% of the institutional-grade market.
- Nearly 40 countries, including all G7 countries, have adopted the U.S.-based REIT approach to real estate investment.

- REITs comprise 98 percent of the headline real estate Sector in the Global Industry Classification Standard.

**Public REITs** are only available through national stock exchanges managed by brokers and investment banks. In the US, banks like Goldman Sachs and Morgan Stanley charge lofty underwriter fees to bring firms public. These fees can be as high as 6% to 7% of the funds raised. In addition to these fees, Investors incur significant expenses when trading on public exchange platforms.

**Non-Traded and Private REITs** are REITs that are not listed on an exchange and not publicly traded. In 2015, the SEC issued an investor bulletin on Non-traded REITs. The SEC noted that the biggest hurdles to Non-Traded and Private REITs are that they are typically highly-illiquid investments, with up-front fees that can range from 10% to 15% of the offering price to compensate for individuals selling investments and organizational costs of deal management. Non-traded REITs also have significant transaction fees for property acquisition or early redemption of shares. Additionally the SEC expressed concerns of lack of share value transparency.



REITs have high barriers to entry, with minimum investment terms that become prohibitive to most investors, and often requiring a large number of investors to syndicate a transaction. Tokenization allows for the further fractionalization of assets into smaller minimums, provided that automated registry management tools preclude the variable costs per investor that lead to higher minimums.

### 3) REAL ESTATE CAPITAL FORMATION PLATFORM

Real estate crowdfunding has recently gained popularity across geographies and in the United States following the Jumpstart Our Business Startups (JOBS) Act in 2012. Initially, only for accredited investors, the JOBS Act exemptions were relaxed by the SEC in 2017 to allow crowdfunding platforms to raise funds from accredited and nonaccredited investors alike.

Today, there are many real estate crowdfunding platforms operating worldwide. These platforms have seen great success, but they remain extremely limited in scale when compared to funds raised by public REITs. Structural requirements under Reg CF preclude crowdfunding exemptions in financings greater than ~\$1M. This is also due in



part because these investments cannot be traded daily like a stock and are therefore highly illiquid. Depending on the nature of the project, investors can expect to have their money tied up in an investment for many years.

### Tokenized Real Estate Drives Value for Real Estate Crowdfunding Platforms

The potential for cheaper and more forgiving capital vs. traditional lending institutions changes the pressures faces by crowdfunding platforms. Decreasing the minimum investable increment opens a property to a more diverse investor base, including those that would not normally consider real estate. The ability to sell minority ownership interests gives the issuer a desirable level of flexibility, allowing them to extract liquidity while simultaneously maintaining control of the asset. This is because fractional owners have less governance than institutional investors who traditionally control major decision rights (e.g. when to sell or refinance). Finally, a system like the blockchain promises lower costs since there will be a reduced need for lawyers and less subscription paperwork.

## THE BENEFITS

The widespread adoption of any new technology is strongly correlated with concrete benefits derived from its implementation. In the case of tokenized real estate, the benefits come in three forms: (1) Reduced operating expenses for fund administration, (2) expanding the market through fractionalization of assets, and (3) lower latency and easier trading of those fractionalized interests. The Vertalo platform is designed to deliver all of these benefits in a way to make it attractive to both administrators and their investor clients.



### REDUCED OPERATING EXPENSES

Existing fund administration processes suffer from lack of technology infrastructure, leading to paper based processes, extended cycle times, additional costs, and human error. The combination of these results drives higher

loads, lower profit, and further illiquidity. The VRE platform is designed to reduce the administrative burden of funds by simplifying the stakeholder data management requirements shouldered by the fund administrator.

The VRE platform is designed to migrate certain transfer and record-keeping processes away from paper forms, overnight mail, and fax machines to modern database and ownership mechanisms enabled by - but scarcely exposed - blockchain technology. The use of blockchain in this context is primarily employed as the database architecture for an ownership ledger that keeps a triple-entry ledger of current and past transactions. This automated registry reduces record keeping and reporting costs for the fund administrator by eliminating manual, non-standardized, and paper processes. Blockchains record all transactions on a ledger where information cannot be changed or erased. Simultaneously, utilizing blockchain technology improves the ability of funds to securely share data with their professional services partners, counterparties or investors, and with regulators.

Tokenization allows for automation of many processes, which is the driving factor of cost reductions. One way the VRE platform addresses automated solutions is with dividend payments. When investing in an asset that delivers passive income, pay distributions are manually done by the General partner, which takes man power and time. The VRE platform is working to make these payouts automated, saving time and money typically spent on these payouts. Another way VRE is implementing automation is with compliance. Once registered on the VRE platform, your investor profile is verified throughout the entire Security Token ecosystem.

#### **EXPANDED INVESTOR BASE AND ENHANCED LIQUIDITY THROUGH FRACTIONALIZATION**

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One of the key benefits that blockchain databases offer is in the fractionalization of assets and the attendant distribution of those fractionalized ownership units in the form of a 'Smart Contract'. Through its use of blockchain technology, the VRE platform will enable a REIT fund administrator to produce digitally represented shares that reflect proportional ownership of the fund, and distribute these fractionalized and dematerialized shares to a wallet controlled directly by an investor or controlled managed by a custodian

Once an asset has been fractionalized, the ownership of that asset is recorded on a decentralized or centralized, open-source or proprietary digital ledger, as reflected by Vertalo's use of both public blockchains and proprietary databases. The investor will have direct online access to those fractionalized shares through a web application provided by Vertalo, or through reference applications and interfaces built upon Vertalo's API's. As these transactions occur on a blockchain-enabled distributed ledger, they are impossible to erase or delete, and if a certificate or other paper document is lost, the ownership ledger can be quickly recreated with 100% accuracy due to Vertalo's record keeping capabilities. It is nearly impossible to lose or steal shares that have been encoded on these database architectures, and they produce a clean, auditable transaction record.

Fractionalized shares not only reduce costs to create, maintain, reissue, and report on assets, but they also enable lower-priced entry into the market, broadening the pool of investors to the benefit of fund administrators and their existing investors. Unlike the current Real Estate market, tokenization allows for selling portions of shares, rather than selling entire shares. Dividends and other payments are more easily calculated when they are recorded in this fashion.

#### **LOWER LATENCY, LOWER FRICTION TRADING**

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Perhaps the ultimate benefit of improved fund administration and fractionalized share ownership is the improvement of liquidity produced by these two previously discussed benefits. When the fund administrators implement with Vertalo, and the underlying shares have been fractionalized and distributed, the shares themselves become easier to buy, sell, and leverage as collateral.

Reducing the latency and complexity of REIT share transactions accrues benefits to both fund administrators and their investors. For the fund administrators there is a direct cost reduction, and for the investors, there is faster liquidity leading to lower discounts at any time of sale. From a market structure perspective, smaller minimum investment increments lower the implied price of liquidity in a market, which results in improved price discovery and erosion of illiquidity discounts on a portfolio basis.

Because it is possible to program compliance (trade and transfer restrictions, for example) into a smart contract, many of the impediments to buying, selling, and collateralizing these valuable assets can be eliminated through the use of the Vertalo platform.

## WELCOME TO VERTALO PLATFORM

Vertalo provides a revenue-generating, white-labeled shareholder registry platform that enhances TA function for our customers as well as their portfolio companies, and advisory clients.



DASHBOARD
ASSETS
FUNDRAISING
CAPITALIZATION
CONTACTS
REPORTS

Kristi Polozoff (Issuer)  
Kristi Polozoff Owner

Allocation
Invite Investor
Investor Account
Distribution

Investments
+

Price
+

Payment
+

Distribution Qualifications
+

Add Qualifications to Abel Hale.

Vesting Schedule

Schedule  
Select Vesting

Vesting Date  
Mm/dd/yyyy

Submit

Add Note

Add note to Abel Hale.

Type your note here...

Submit

DISTRIBUTIONS  
80

UNITS  
801,708.00

☐ Name
 Search

Units
Percent
Status  
Sort by

|                                     |                   |   |           |        |        |
|-------------------------------------|-------------------|---|-----------|--------|--------|
| <input checked="" type="checkbox"/> | Abel Hale         | ✓ | 18,298.00 | 2.282% | closed |
| <input type="checkbox"/>            | Alayna Hicks      | ✓ | 13,780.00 | 1.719% | closed |
| <input type="checkbox"/>            | Alexandra Payne   | ✓ | 8,890.00  | 1.109% | closed |
| <input type="checkbox"/>            | Alexis Jenkins    | ✓ | 2,343.00  | 0.292% | closed |
| <input type="checkbox"/>            | Alfredo Christian | ✓ | 7,905.00  | 0.986% | closed |
| <input type="checkbox"/>            | Amaya Pace        | ✓ | 2,388.00  | 0.298% | closed |
| <input type="checkbox"/>            | Angela Howell     | ✓ | 4,422.00  | 0.552% | closed |
| <input type="checkbox"/>            | Anika Sharp       | ✓ | 3,442.00  | 0.429% | closed |
| <input type="checkbox"/>            | Annalise Clark    | ✓ | 11,767.00 | 1.468% | closed |
| <input type="checkbox"/>            | Brandon Ewing     | ✓ | 9,747.00  | 1.216% | closed |
| <input type="checkbox"/>            | Braylen Dickerson | ✓ | 5,134.00  | 0.64%  | closed |
| <input type="checkbox"/>            | Bria Delgado      | ✓ | 7,685.00  | 0.959% | closed |
| <input type="checkbox"/>            | Bryan Atkinson    | ✓ | 18,095.00 | 2.257% | closed |
| <input type="checkbox"/>            | Calvin Spencer    | ✓ | 2,302.00  | 0.287% | closed |

VERTALO

DASHBOARDASSETS

FUNDRAISING

CAPITALIZATION

CONTACTS

REPORTS

Kristi Polozoff (Broker)

Kristi Polozoff Owner

Account Information

Delegates

Qualifications

Name: Kristi Polozoff

Email: kristip@example.com

URL: www.example.com

City: Austin

State or Province: Texas

Country: United States

Postal Code: 78745

Required Documents

Max 25MB of PDF or image (jpg, jpeg, or png) file can be uploaded.

You haven't uploaded any documents yet!

Vertalo Subscription Agreement

Upload your Vertalo Subscription Agreement here.

Choose Fileno file selected

Investor Pitch Deck

Upload your investor pitch deck here.

Choose Fileno file selected

Management Team Biographies

Upload the management team biographies here.

Choose Fileno file selected

Officer Certificate

Upload the officer here.

Choose Fileno file selected

Opinion of Counsel

Upload the opinion of counsel here.

Choose Fileno file selected

Other Documents

Max 25MB of PDF or image (jpg, jpeg, or png) file can be uploaded.

Upload any other documents here.

Upload Other Documents Here

Legal Information

Click the Broker Check button to verify registration or enter information manually.

You haven't added any legal information yet!

Verify Brokerage Registration

BrokerCheck

Broker Dealer Tax ID Number

Broker Dealer ID License Number

Brokerage Firm Name

Save

VERTALO

DASHBOARD

ASSETS

FUNDRAISING

CAPITALIZATION

CONTACTS

REPORTS

Kristi Polozoff (Issuer)

Kristi Polozoff Owner

Round Management

Traunch Management

Round Information

Round NameSeed

Opens OnJanuary 1st 2020

Closes OnJanuary 31st 2020

Terms URLhttps://www.heresanotherexample.com

CustodianDirect Custody

Total Units20,000.00

Purchase Price\$20.00

Latest Price-

StatusActive

Distributors

Distributor

Units Under Management

Status

Distributor Name

200,000

Pending

Token Information

Token NameSeed

SymbolNON

ChainEthereum-rinkeby

StatusNOT DEPLOYED

Deploy

Stakeholder Ledger

Investor

Units

Percentage

Status

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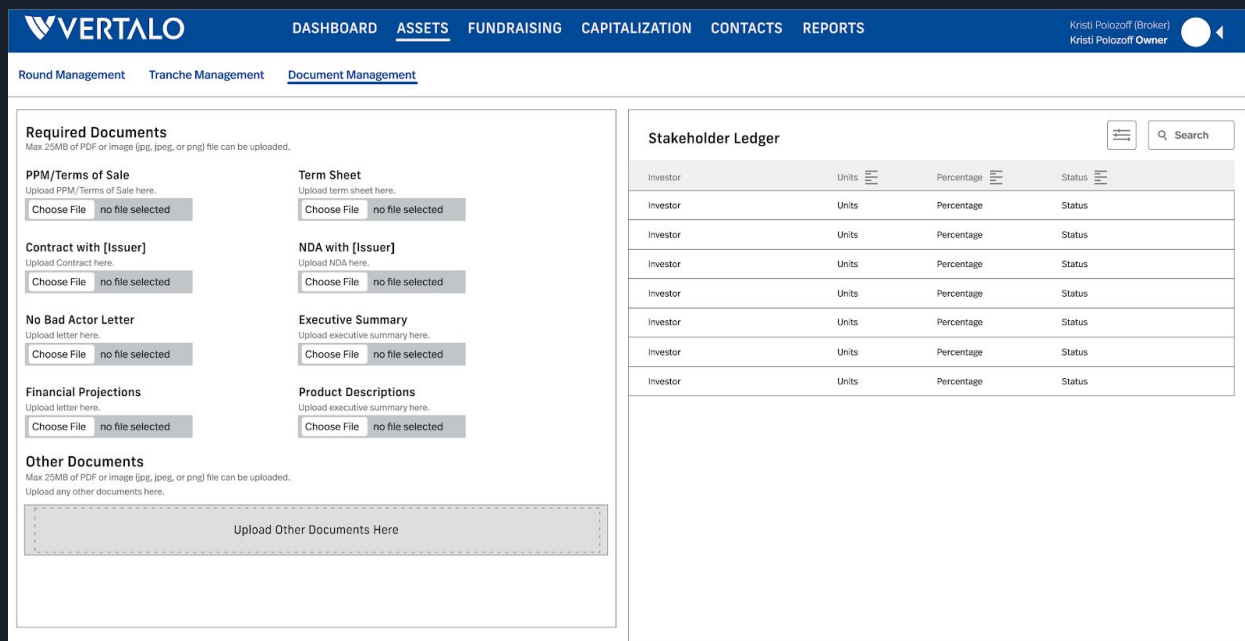
Status

Investor

Units

Percentage

Status



## VERTALO CAPABILITIES

Vertalo develops platform technologies and plays the role of a transfer agent. Core capabilities of Vertalo include the ability to:

- Monitor issuance and transfers to ensure compliance
- Keep a real-time ledger of stakeholders in a company and issue reports
- Act as an intermediary to issue dividends or payouts
- Facilitate proxy votes and other communications with investors

Vertalo licenses its technology platform to individual issuers, fund managers, and investment banks to allow for:

- Shareholder registry management platform for individual issuers
- Capital formation platform for Broker Dealers and Multi-fund Managers
- Asset lifecycle management for high-volume Issuers and Investment Banks

### ASSET INVESTOR DOCUMENTS

A critical element in any stakeholder data management platform, such as a fund administration system or cap table platform, is the uploading, storage, and indexing of documents. The Vertalo platform provides critical document management capabilities that support ongoing and routine functions including:

- Investor documentation
- Onboarding
- Transaction reporting
- KYC/AML/Accreditation
- Support and other features as required

As part of the REIT onboarding process, Vertalo will ensure that all documents that support the fund and its investors are properly indexed and associated with the correct parties. This effort will involve the auditing of the ownership history and likely the necessity of historical data entry to support the presentation of a history of the REIT's transactions.

Necessary components for this phase include a full history of the funds' ownership in spreadsheet form, which includes dates, prices, amounts, dispositions, and other relevant transactional data. This data will be committed to chain as part of the auditable record of the fund history.

Investors who hold assets managed by Vertalo's platform fund administrator will be able to see their history within the investor portal, accessible using standard credentials supported by the underlying Vertalo system. As investors transact, their holdings will be updated within this system.

### **ASSET DATA TRANSFORMATION (ANALOG → DIGITAL)**

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Uploading Cap Table history and mapping to investor wallets (process referred to as ETL), and KYC/AML process will pass along key information needed for the Digital Security ecosystem, as platforms will integrate together for efficient data management and transfer. This will also help with cross-platform compliance, as Digital Asset distribution will require investors to be held to a certain standard involving KYC/AML/Accreditation.

Vertalo aims to improve investor communications between GPs, Fund Administrators, and stakeholders with a platform that can directly relay correct and verifiable information, where all third parties have access. This will improve transparency and communications across the board, saving time and money on investor relations.

Overall, the benefits Vertalo is implementing into the platform for improved Data transformation include:

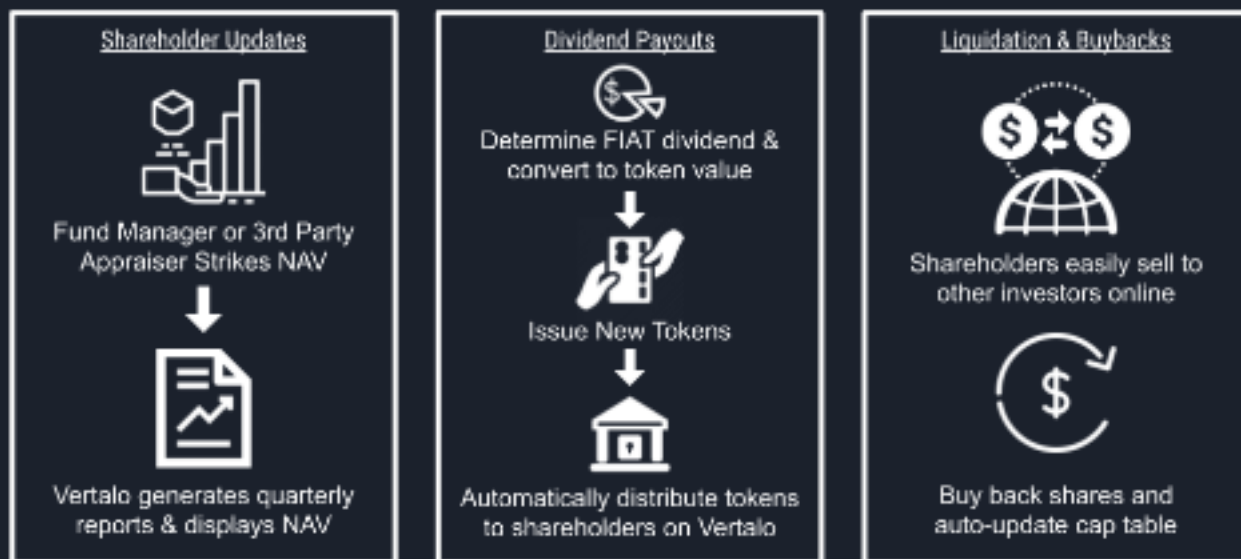
- Establishment of Custody requirements/process
- Creation of tradeable asset
- Direct exchange/asset listing
- Asset Trade testing
- Investor consents
- Final Investor KYC/AML/Accreditation and Badging
- Fund process automation and documentation
- Fund manager training and internal documentation
- Test Transactions
- Finalize listing/Pre register investors
- Issuer and Investor direct communications at the conclusion of the completed onboarding

### **REIT/FUND ADMINISTRATION (FLOW MAP)**

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For REIT managers who work with 3rd party fund administrators, the Vertalo platform can simplify reporting and pro rata distributions, provided that a NAV is struck internally or independently. Internally managed single tranche REITs will have varying requirements from those that leverage a 3rd party fund admin. Multi-tranche and open ended REITs will have to consider LP capital accounts when distributing performance reports, as well as dividends.

## Optimizing Fund Administration With Vertalo



### ISSUER/INVESTOR COMPLIANCE

Prior to the onboarding of any REIT asset, issuers and investing parties will ascertain the proper ownership of the asset via standard diligence methods. Once this assurance has been obtained, and the structure of the fund has been established, the options for tokenization and the adherence to any specific compliance requirements can inform the implementation of the tokenized REIT on the Vertalo platform.

It is the responsibility of the REIT manager to communicate and share documents with the REIT investors. These communications come in the form of investment documents, dividends, disclosures, ownership statements, transaction receipts, and responses to various ad hoc requests, like copies of checks, K-1s, and other forms of tax-related correspondence.

The Vertalo platform will enable the distribution of shares, forms, consents, and messages for and between the REIT fund administrator and other relevant parties (legal, compliance, tax, investors, banks).

### CAP TABLE/OWNERSHIP DILIGENCE

An important responsibility of the REIT Manager is the maintenance of current and accurate records pertaining to ownership. Cap tables are one way of looking at this responsibility: they record the current and former ownership of shares in the asset.

A key component of the REIT fund is its cap table (share holder) registry. The platform utilizes Vertalo's on-chain cap table and registry to record ownership and facilitate the trade, transfer or collateralization of any shares held by the REIT and its shareholders.

The Vertalo platform will manage the sensitive data related to shareholder ownership. As a registered Transfer Agent, Vertalo performs traditional investor relations activities using modern blockchain technology.

A critical component of Vertalo platform implementation is the creation of the digital distributed ledger that manages and issues digital shares representing the investor holdings - current and former - in the REIT. The Vertalo platform will modernize and reduce the cost for REIT Fund administration to the benefit of all relevant parties.

### **KEYLESS CUSTODIAL WALLETS**

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Vertalo understands that novel technologies cannot present a steep learning curve and demand significant procedural changes of its users. As such, Vertalo simplifies the process for investors who, at a minimum, can navigate a brokerage platform account. One method is by creating Keyless Custodial Wallets.

These keyless custodial wallets that Vertalo is building will manage investor holdings in a comfortable, simple, and easy to use digital format. A key factor driving mainstream adoption of tokenization will be masking the complexity and providing intuitive user experiences for investors who may get scared off by new tech and blockchain wallets with private keys. The keyless custodial wallet will be functional by the connection of hot wallets (enables faster trading) to custodial cold wallets (enable security). This process will be taking place on the back end, while investors viewing on the front end will see a simple equity bearer interface.

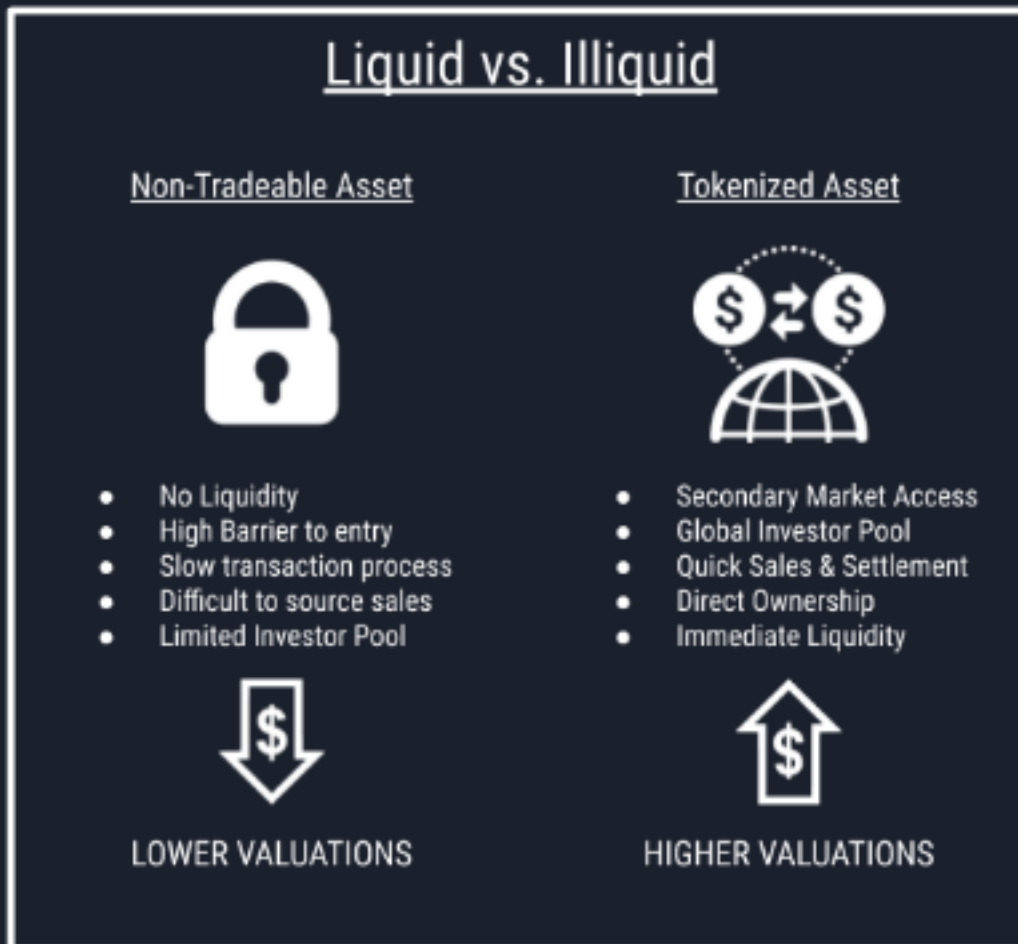
## **LIQUIDITY**

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Perhaps the most discussed benefit of Tokenization is improved liquidity, specifically for assets that are illiquid or less liquid such as private REITs. Tokenization is looking to aid in increased liquidity for typically illiquid assets by creating marketplaces, lowering the barrier to become liquid, and creating capital access solutions for investors all through direct ownership and listability.

Illiquid assets, which includes most Real Estate, debt, company equity, collectables, and more, have no marketplace or capability to trade quickly. In order to sell illiquid assets as an investor, you must find a private buyer yourself and get approval from the General Partner, which is not an easy process.





Vertalo is currently working to improve the liquidity conditions for illiquid assets, specifically Real Estate. Tokenization will allow for direct ownership and listing capabilities for the investor. The goal is for investors of illiquid assets to take their accessible equity, and in a compliant way, list it or offer it to secondary trading markets. Tokenization also enhances the idea of fractional ownership, as not only will equity be listable directly by the investor, but the investor can sell any portion of their own equity. This will bring more investors to the table as there will be a lower barrier to entry to buy into these assets. Lastly, increased liquidity has shown to add value to assets, as tradeability is a desired feature of many investors. Many investors will pay a premium for liquid assets and reduced monetary friction.

Vertalo is also working to implement borrowing against tokenized equity. This will give investors immediate access to capital, which will expand the value of assets that were illiquid before. This is because many assets must go through a one year lockup period where trading is prohibited. The ability to borrow against tokenized equity will add another liquidity layer for investors, where they typically wouldn't be able to trade.

## ORGANIZATION

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**Dave Hendricks**, a seasoned technology executive, is the CEO of Vertalo. After leading companies like CheetahMail from obscurity to sector-dominance, Dave became the cofounding COO and CFO (and later President and

Managing Director International) of LiveIntent, where over five years, he helped take the company from pre-revenue pivot to \$100 million in revenue. Dave started his career at Arthur Andersen where he focused on technology related to audits and securitizations. Dave left Arthur Andersen and joined JE Robert where he led the development of an early decentralized database used to unwind the illiquid real estate positions taken on by S&Ls causing the formation of the Resolution Trust Corporation. After a stint as a technology headhunter, Dave joined database giant Oracle Corporation and ran the worldwide relationship between Oracle and global accounting firm Arthur Andersen.

**William Baxter, PhD.**, is the CTO of Vertalo. After earning a PhD in Math from UC Berkeley, William has enjoyed a successful career in software as a leader who codes. As VP of Technology he took Experian CheetahMail from a startup to the world's largest email marketing platform. At Bloomberg he managed the team that upgraded mission-critical code checking systems used by developers company wide. An early adopter of agile and lean management, William launched several dozen agile development teams on behalf of enterprise clients. William also has a black belt in Shoto-Kai karate. He started his first company at the age of 13 (a skateboard shop) and has loved the entrepreneurial life ever since.

**Gautam Gujral** is Vertalo's General Counsel. As Managing Director at Credit Suisse (20 years), Gautam represents the Prime Services department. He monitors all legal, tax and regulatory developments applicable to the PSD and clients. His network extends to regulatory bodies, trade associations and law firms, owing the reputation for being the bank's "go-to person" for client requests. Gautam has his J.D. from Georgetown University and a B.A. in Political Science from Colorado College.

## STRATEGIC PARTNERS:

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### VERTALO

Launched in 2018, Vertalo is a B2B SaaS Digital Transfer Agent founded to map the gaps between primary and secondary trading of digital securities offerings. As the 'Operating System for Digital Assets', Vertalo is focused on connecting and enabling the digital asset economy, providing an industry-leading cap table, Digital Asset Transformation, transfer agent, investor relations and onboarding solution that facilitates direct ownership and direct listing of any private asset. A subsidiary of SeriesX, Vertalo is headquartered in Austin, TX with offices in New York City, Seoul, and San Francisco Bay Area. Learn more about SeriesX and Vertalo at [www.vertalo.com](http://www.vertalo.com).

### INVESTREADY

InvestReady verifies accredited investor status for 506c-regulated private equity issuers, and verifies funds-available status of non-accredited investors for crowdfunding portals and real estate investment platforms who need to remain compliant. With multiple APIs for customized integration options, InvestReady is an industry leading financial technology firm that provides both non-accredited and accredited investors with a variety of the tools to make private equity investing easy, secure, scalable, and flexible across different crowdfunding portals <https://www.investready.com/>

### PRIMETRUST

Prime Trust is a chartered, insured financial institution providing token and FIAT custody, funds processing, AML/KYC compliance, and transaction technology for the new digital economy as a "Qualified Custodian." As a technology-driven trust company Prime Trust's mission is to provide digital asset issuers with best-in-class solutions to seamlessly meet the needs of their offerings and of exchanges and secondary markets. Learn more about Prime Trust at [www.primetrust.com](http://www.primetrust.com).

### TZERO

tZERO, a technology firm that was founded with the goal of utilizing distributed ledger technology (DLT) to revolutionize Wall Street so that it is more efficient, accessible and transparent. In 2016, tZERO ATS became the first US regulated trading venue to trade a digital security. tZERO is a keiretsu company of Medici Ventures, the blockchain subsidiary of Overstock.com, Inc. (NASDAQ:OSTK).

## LEGAL DISCLAIMER

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### **FORWARD-LOOKING STATEMENTS**

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